

REMARKS

Claims 1 through 20 remain pending. Claims 4, 5 and 8 through 20 have been withdrawn from consideration. Claims 1, 2, 6 and 7 stand under rejection. Claim 3 stands under objection solely for its dependency from a rejected claim. In response to the final Office Action, dated May 21, 2003, it is proposed that claim 1 be amended as shown above. Care has been taken to avoid the introduction of new matter. It is believed that the amendment to claim 1 clearly places the application in condition for allowance. Entry of the Amendment and allowance of the application are respectfully solicited.

Claims 1 through 3, 6 and 7 have been rejected under the second paragraph of 35 U.S.C. § 112. The Office Action has held that the recitation of the second support member in parent claim 1 is insufficient to define the structure. In response, it is proposed that claim 1 be amended to recite, *inter alia*, the following:

a second support member located along an opposite side of said mounting member and being provided between said circuit board and said mounting member for supporting said circuit board, said second support member having a thickness substantially equal to said interval between said circuit board and said mounting member . . . .

It is submitted that the claim as so amended provides a person of ordinary skill in the art a clear structural recitation of the structure of the second support member. As the amended claim fully complies with the requirements of 35 U.S.C. § 112, entry thereof is respectfully solicited.

Claims 1, 6 and 7 have been rejected under 35 U.S.C. § 103(a) as being unpatentable over AAPA in view of Okubora, of record, and U.S patent 6,461,058 (Birch).

Under well established legal precedents, obviousness under 35 U.S.C. §103 must be determined by considering (1) the scope and content of the prior art; (2) ascertaining the differences between the prior art and the claims in issue; and (3) resolving the level of ordinary skill in the pertinent art. To sustain a rejection for obviousness a source in the applied prior art must be identified that establishes a realistic requisite motivation for combining applied references to arrive at the claimed invention with a reasonable expectation of successfully achieving a specific benefit. *Smith Industries Medical Systems v. Vital Signs*, 183 F.3d 1347, 51 USPQ2d 1415 (Fed. Cir. 1999). That is, the requisite motivation to support the ultimate legal conclusion of obviousness under 35 U.S.C. §103 is not an abstract concept, but must stem from the applied prior art as a whole and have realistically impelled one having ordinary skill in the art, at the time the invention was made, to modify a reference in a specific manner to arrive at a specifically claimed invention with a reasonable expectation of achieving a specific benefit. *In re Newell*, 891 F.2d 899, 13 USPQ2d 1248 (Fed. Cir. 1989). A "clear and particular" factual finding must be made as to a specific understanding or specific technological principle which would have realistically impelled one having ordinary skill in the art to modify an applied; *Ecolchem Inc. v. Southern California Edison, Co.*, 227 F.3d 361, 56 USPQ2d 1065 (Fed. Cir. 2000); *In re Kotzab*, 217 F.3d 1365, 55 USPQ 1313 (Fed. Cir. 2000); *In re Dembiczak*, 175 F.3d 994, 50 USPQ2d 1614 (Fed. Cir. 1999). It should be recognized that, even if the prior art *could* be modified so as to result in the combination defined by the claims, the modification would not have been obvious unless the prior art suggested the desirability of the modification. *In re Deminski*, 796 F.2d 436, 230 USPQ 313 (Fed. Cir. 1986). In the absence of such a prior art suggestion for modification of the

references, the basis of the rejection is no more than inappropriate hindsight reconstruction using appellant's claims as a guide. *In re Warner*, 379 F.2d 1011, 154 USPQ 173 (CCPA 1967).

It is respectfully urged that the teachings of AAPA, Okubora and Birch, taken individually or in combination, would not have led the artisan to the optical data link structure required by amended claim 1 or its dependent claims 6 and 7. In describing Okubora, the Office Action identifies metallic partition plate 40 (Fig. 12) as a means for supporting the circuit board in spaced relation from the mounting member. However, line 65, column 7, to line 11, column 8 of Okubora indicates that member 40 prevents deterioration in cross-talk between the channel, i.e., circuit boards 12 and 14. There is nothing in the description of Fig. 12 that indicates that member 40 supports the circuit board 12 (or 14).

Indeed, it appears that the Office Action relies upon Birch for disclosing support members for application to the claim requirements, wherein metallized clip 34 in Figs. 4A and 4B is equated to the claimed first support member and retaining clips 37 are equated to the claimed second support member in the pending claims. However, with reference to Figs. 3, 4A to 4C, and accompanying description in the specification, clips 37 are used to retain optical assembly 33 against lower housing part 31; receiver shield 38 and transmitter silicon assembly 40 are assembled to form optical assembly 33, and electronic components are mounted on circuit board 43, which is supported by posts 39 provided in optical assembly 33; clip 34 electrically contacts with head shield 32 and is disposed so as to shield against transmission of electromagnetic radiation through aperture 36; clips 37 are located apart from transmitter silicon assembly 40 of optical

assembly 33. Thus, clips 34 and 37 do not support optical assembly 33 but are provided to realize electrical shielding.

As required by claim 1, the first support member supports the optical element assembly on at least both sides of the first support member, and thus positions the optical element assembly in the direction of a reference axis perpendicular to the optical axis of the optical element assembly.

Referring to Figs. 2 to 4 and 8 of this application, the following structure is illustrated: mounting member 22 has two positioning holes 22e for first support member 30; cutout 22d of mounting member 22 is located between one positioning hole 22e (left) and the other positioning hole 22e (right); first support member 30 has a first portion provided on the left positioning hole 22e, a second portion, and a third portion provided on the right positioning hole 22e; the second portion is provided between the first portion and the third portion; and optical element assembly 24 is provided between the first portion and the third portion.

As described above, the first support member 30 positions the optical element assembly 24. In addition, the first support member 30 is located along one side of mounting member 22 and acts as a spacer so that circuit board 26 is located apart from mounting member 22. The second support member 32 is located along the other side of the mounting member 22 and acts as a spacer so that circuit board 26 is located apart from mounting member 22. Since first and second support members 30 and 32 act as spacers, the height of first support member 30 is equal to an interval between circuit board 26 and mounting member 22, and the height of second support member 32 is equal to the interval.

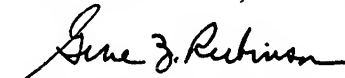
The above relationships among the circuit board, mounting member, optical element assembly and first and second support members are explicitly required in parent claim 1. None of the applied references, taken individually or in combination, would have compelled the artisan to modify AAPA to arrive at the invention claimed.

Claim 2 has been "rejected under 35 U.S.C. § 103(a) as being unpatentable over, AAPA as modified, as applied to claim 1 above, and further in view of [Chen]." This rejection is understood to rely on Okubora and Birch, as well as AAPA and Chen. Indeed Chen has been relied upon only for its disclosure of an electrically conductive cover. Claim 2 is dependent from claim 1 and thus requires every feature recited in its parent claim. Claim 2, therefore, is patentably distinguishable from the applied prior art for at least the same reasons as are applicable to independent claim 1.

Accordingly, it is submitted that the present application is presently in condition for allowance. Entry of the Amendment and allowance of the application are respectfully solicited. Please charge any shortage in fees due in connection with the filing of this paper, including extension of time fees, to Deposit Account 500417 and please credit any excess fees to such deposit account.

Respectfully submitted,

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